AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1.-4. (Canceled)

5. (Currently Amended) A method for enhancing an immune response in a subject, comprising

a) isolating a population of cells comprising one or more of a mature B cell and a B cell progenitor from the subject;

b) contacting the population of cells comprising one or more of a mature B cell and a B cell progenitor with a composition comprising (i) an IL-21 polypeptide comprising the amino acid sequence of SEQ ID NO: 1 or (ii) a variant ~~thereof~~ of the amino acid sequence of SEQ ID NO: 1 with 1-5 amino acid substitutions, deletions, or additions, wherein ~~the IL-21 polypeptide comprises the amino acid sequence of SEQ ID NO: 1 and~~ the variant retains the ability to bind to the IL-21 receptor and produce a physiological effect produced by binding of the IL-21 polypeptide comprising the amino acid sequence of SEQ ID NO: 1 to the IL-21 receptor, and wherein the population of cells optionally is contacted with at least one composition comprising an antigen, thereby inducing differentiation of at least one of the mature B cell and the B cell progenitor into one or more of a memory B cell and a plasma cell;

c) isolating or purifying one or more of the memory B cell and the plasma cell; and

d) introducing at least one of the memory B cell and the plasma cell into the subject, thereby enhancing the immune response.

6. (Canceled)

7. (Canceled)

8. (Previously Presented) The method of claim 5, wherein the subject is a human subject.

9. (Canceled)

10. (Previously Presented) The method of claim 5, wherein the population of cells is contacted with at least one composition comprising an antigen.

11. (Original) The method of claim 10, wherein the antigen comprises a viral antigen, a bacterial antigen, or an antigen from a parasite.

12. (Previously Presented) The method of claim 5, wherein the B cell progenitor is an immature B cell.

13.-17. (Canceled)

18. (Currently Amended) A method for treating a subject with a condition comprising a specific deficiency of at least one of memory B cells and plasma cells, comprising

a) isolating a population of cells comprising one or more of a mature B cell and a B cell progenitor from the subject;

b) contacting the population of cells comprising at least one of a mature B cell and a B cell progenitor *ex vivo* with a composition comprising (i) an IL-21 polypeptide comprising the amino acid sequence of SEQ ID NO: 1 or (ii) a variant ~~thereof~~ of the amino acid SEQ ID NO: 1 with 1-5 amino acid substitutions, deletions, or additions, wherein ~~the IL-21 polypeptide comprises the amino acid sequence of SEQ ID NO: 1 and~~ the variant retains the ability to bind to the IL-21 receptor and produce a physiological effect produced by binding of the IL-21 polypeptide to the IL-21 receptor, and wherein the population of cells optionally is contacted with at least one composition comprising an antigen, thereby inducing differentiation of at least one B cell into one or more of a memory B cell and a plasma cell;

c) isolating the memory B cell, the plasma cell, or both; and

d) introducing at least one of the memory B cell and the plasma cell into the subject.

19. (Canceled)

20. (Previously Presented) The method of claim 18, wherein the subject is a human subject.

21.-33. (Canceled)

32. (Previously Presented) The method of claim 1, wherein the composition comprises the IL-21 polypeptide comprising the amino acid sequence of SEQ ID NO: 1.

33. (Previously Presented) The method of claim 18, wherein the composition comprises the IL-21 polypeptide comprising the amino acid sequence of SEQ ID NO: 1.

34. (Previously Presented) The method of claim 1, wherein the composition comprises a variant of the amino acid sequence of SEQ ID NO: 1, wherein 1-5 amino acids of SEQ ID NO: 1 have been substituted, deleted, or added.

35. (Previously Presented) The method of claim 18, wherein the composition comprises a variant of the amino acid sequence of SEQ ID NO: 1, wherein 1-5 amino acids of SEQ ID NO: 1 have been substituted, deleted, or added.